

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for protecting aircraft operation at all times while an aircraft is in service, the aircraft having a pilot-operated control system to operate aircraft flight and taxi controls and an on-board autopilot coupled to the control system to automatically operate the aircraft flight and taxi controls, the system for protecting aircraft operation comprising:

an anti-crash system on the aircraft that automatically and without human intervention transmits commands to prevent the aircraft from crashing into the ground and into any objects on the ground and in the air;

an auto-controlling and piloting system on the aircraft that receives the commands from the anti-crash system and is configured to prevent control by the pilot-operated control system; and the on-board autopilot, the auto-controlling and piloting system overriding the pilot-operated control system and the autopilot to control movement of the aircraft on the ground and in the air;

a monitoring device system that monitors aircraft operation at all times while the aircraft is in service, the monitoring device system communicating with said anti-crash system; and

a secondary aircraft controller system on board the aircraft and coupled to the auto-controlling and piloting system for controlling the aircraft flight and taxi controls independent of the pilot-operated controls and the on-board autopilot.

2. (Previously Presented) The system of claim 1, further comprising an authorities security aircraft flight equipment system remote from the aircraft communicating

with the anti-crash system and the auto-controlling and piloting system and the monitoring system.

3. (Previously Presented) The system of claim 2, wherein the anti-crash system only allows the aircraft to operate on a course set by proper authorities before lift off.

4. (Previously Presented) The system of claim 2, further comprising an anti-crash system installed in a ground-based object that sends no-fly zone information comprising distance and height signals to the anti-crash system on the aircraft and signals causing the aircraft to avoid the ground-based object or other objects.

5. (Previously Presented) The system of claim 1, comprising an anti-crash system installed in a ground-based object that is configured to allow proper authorities to authorize changes in the course of the aircraft from the ground in emergency or crisis situations.

6. (Previously Presented) The system of claim 1, wherein the monitoring device system comprises an on-demand monitoring device system that is configured to automatically engage simultaneously when a problem is detected, the on-demand monitoring system enabling authorities to monitor on-board sensors.

7. (Previously Presented) The system of claim 6, wherein the on-demand monitoring device system includes a live feed of video and audio from the aircraft to a remote ground-based system.

8. (Previously Presented) The system of claim 3, wherein a course set before lift off in the aircraft can be changed during flight only by use of the authorities security aircraft flight equipment system installed in a ground-based object by multiple authorities entering multiple codes.

9. (Previously Presented) The system of claim 8, wherein the multiple codes are changed on a random basis to ensure that only authorized authorities can change a course or take control of an aircraft.

10. (Previously Presented) The system of claim 1, wherein the auto-controlling and piloting system allows authorities to authorize the operation of the aircraft in the event of pilot or crew member inability to safely pilot the aircraft due to any reason.

11. (Currently Amended) An aircraft protection system for use at all times while an aircraft is in service, the aircraft having a control system to operate aircraft flight and taxi controls and an ~~on-board~~ on-board autopilot coupled to the control system to automatically operate the aircraft flight and taxi controls, the system for protecting aircraft operation comprising:

an on-board monitoring system configured to monitor the aircraft at all times while the aircraft is in service and to transmit communication signals ~~responsive thereto~~;

an anti-crash control system on board the aircraft and coupled to the monitoring system and responsive to the communication signals to automatically and without human intervention transmit commands to prevent the aircraft from crashing into any object;

an auto-controlling and piloting system on board the aircraft that receives the commands from the anti-crash system and prevents control of the aircraft by the control system and the on-board autopilot, the auto-controlling and piloting system overriding the autopilot to control movement of the aircraft on the ground and in the air;

a secondary aircraft controller system on board the aircraft to control the aircraft flight and taxi controls in response to the auto-controlling and piloting system; and

an authorities security aircraft flight equipment computer remote from the aircraft that communicates with the anti-crash system, the auto-controlling and piloting system, and the monitoring system.

12. (Previously Presented) The system of claim 11, wherein the anti-crash control system comprises an input for receiving the communication signal from the monitoring system and an output coupled to the auto-controlling and piloting system and secondary aircraft controller system, the anti-crash control system configured to assume control of the aircraft upon receipt of the communication signal and prevent control of the aircraft the aircraft control system and the on-board autopilot in the aircraft.

13. (Currently Amended) An aircraft flight management system comprising:
an aircraft control and communication module configured to be coupled to an aircraft control system that is secondary to existing aircraft electronic flight controls and electronic engine controls, the module including an anti-crash system that ~~detects~~is operational at all times while the aircraft is in service to detect impending crashes with ~~objects~~any object and sends an electronic command signal to an auto-controlling and piloting system to automatically override aircraft autopilot and flight and engine control commands without any human intervention, and configured to prevent control by unauthorized ground-based remote control and by an on-board autopilot at all times while the aircraft is in service.

14. (Previously Presented) The system of claim 13, wherein the module comprises sensors configured to be mounted in the aircraft to detect obstructions on the ground hazardous to safe aircraft flight operations.

15. (Previously Presented) The system of claim 13, wherein the module is configured to receive communications from other aircraft and ground-based facilities.

16. (Previously Presented) The system of claim 13, wherein ground-based facilities comprise governmental law enforcement and military facilities.

17. (Currently Amended) An aircraft flight management system comprising:
an aircraft control and communication module configured to be coupled to an aircraft control system that is secondary to existing aircraft electronic flight controls and electronic engine controls, the module including an anti-crash system that ~~detects~~is operational at all times while the aircraft is in service to detect impending crashes with objects and sends an electronic command signal to an auto-controlling and piloting system, that is adapted to receive electronic communication signals automatically generated from sensors in the aircraft and from ground-based and air-based facilities without any flight crew or other human intervention in the air or on the ground to override aircraft autopilot and flight and engine control commands from a cockpit of the aircraft to prevent control by the on-board autopilot and to avoid collisions with the earth and other objects at all times while the aircraft is in service.

18. (Currently Amended) An aircraft flight management system, comprising:
a secondary control system for interfacing with aircraft flight control systems to enable automatic override of existing aircraft control systems upon receipt of automatically generated air-based and ground-based transmission signals in response to commands from an anti-crash system that monitors the operation of the aircraft at all times while the aircraft is in service, which commands and transmission signals are generated without any human intervention, the flight management system configured to prevent control by an on-board autopilot at all times while the aircraft is receiving the transmission signals.

19. (Currently Amended) An aircraft management system for an aircraft having flight and taxi controls and an on-board autopilot coupled to the flight controls, the system comprising:

a monitoring system ~~for~~that monitors the operation of the aircraft at all times while the aircraft is in service to automatically detecting-detect when the aircraft is on a collision course with an object or the ground and automatically generating a detection signal when a collision course with an object or the ground is detected; and

an anti-crash system coupled to the monitoring system for receiving the detection signal therefrom and coupled to the autopilot and coupled to the flight and taxi controls via a secondary control system on the aircraft, the anti-crash system responsive to the detection signal to send commands to an auto-controlling and piloting system on board the aircraft to automatically bypass the autopilot and control the path of the aircraft without any human intervention to avoid a collision with the object or the ground, the anti-crash system configured to prevent control by the on-board autopilot when the anti-crash system is activated.

20. (Previously Presented) A system for protecting aircraft operation, comprising:

an anti-crash system that automatically prevents an aircraft from colliding with other objects;

an auto-controlling and piloting system, receiving commands from said anti-crash system;

a monitoring device system communicating with said anti-crash system;

an authorities security aircraft flight equipment computer communicating with said anti-crash system, said auto-controlling and piloting system, and said monitoring system; and

a secondary aircraft controller system, wherein a course set before lift off in the aircraft can be changed during flight only by use of the authorities security aircraft flight equipment computer installed in the ground-based object by three separate authorities entering three separate codes.

21. (Previously Presented) The system of claim 20, wherein the three separate codes are changed on a random basis to ensure that only authorized authorities can change a course or take control of an aircraft.